

ABSTRACT

Reactor device (R) for carrying out chemical reactions requiring heat exchange, the reactor is elongate along an axis (XX'), and has, at a first end, at least one orifice (16) for supplying at least one reactant, at an opposite end, at least one orifice (18) for evacuating the effluents formed, a plurality of heat exchangers (12) separated by at least one internal partition (14) and passages for circulating the reactant or reactants and/or effluents, provided between the heat exchangers and the internal partitions. The reactor (R) has at least one enclosure (10) made of refractory material providing heat insulation and containing a heat exchangers (12) and internal partitions (14). The enclosure is contained in an envelope (20) to contain the reactant or reactants and/or effluents circulating inside the reactor.

